

Japan, Borneo, Sumatra, Java, New Zealand, Peru, Colombia, Venezuela, Trinidad, Mexico, and Texas are salient points.

The constant recurrence of hydrocarbons in volcanic and igneous rocks, volcanic emanations, metallic and other veins, meteorites, comets and other stellar bodies, clearly demonstrates that petroleum is inorganic. The hydrocarbon emanations sometimes follow closely the volcanic lava, as in the Mexican and other oil fields, but they need not be, and often are not, accompanied to the surface by volcanic rocks. They must, notwithstanding, everywhere be held to be of a solfataric volcanic nature, as shown by their peculiar position along the tectonic structural disturbances, and because, moreover, they could not originate in the mass of the impervious sediments, and could only travel through these by means of faults or fissures from deep sources. Besides, with their associated salt and sulphur they are identical with solfataric volcanic vapors emanating from all the volcanic districts of the earth, and are absolutely unlike anything else in nature known to be in the active process of formation at the present time. Like volcanic vapors these hydrocarbons are always found under high pressures, often giving rise to violent explosions and sudden outbursts in enormous quantities, after earthquake shocks, and along disturbed dynamic lines; and, like volcanic vapor, they are also found at times to be still hot and associated with hot waters.

RESUSCITATION FROM MINE GASES AND SHOCK

The U. S. Bureau of Mines as the result of careful investigation recommends the following procedure in rendering first aid to those in need of artificial respiration:

In case of gassing, remove the victim at once from gaseous atmosphere. Carry him quickly to fresh air and immediately give manual artificial respiration. Do not stop to loosen clothing. Every moment of delay is serious.

In case of electric shock, break electric current instantly. Free the patient from the current with a single quick motion, using any dry non-conductor, such as clothing, rope or board, to move patient or wire. Beware of using any metal or moist material. Meantime have every effort made to shut off current.

Attend instantly to the victim's breathing. If the victim is not breathing, he should be given manual artificial respiration at once.

If the patient is breathing slowly and regularly, do not give artificial respiration, but let nature restore breathing unaided.

In gas cases, give oxygen. If the patient has been gassed, give him pure oxygen, with manual artificial respiration.

The oxygen may be given through a breathing bag from a cylinder having a reducing valve, with connecting tubes and face mask, and with an inspiratory and an expiratory valve, of which the latter communicates directly with the atmosphere.

No mechanical artificial resuscitating device should be used unless one operated by hand that has no suction effect on the lungs.

Use the Schaefer or prone pressure method of artificial respiration. Begin at once. A moment's delay is serious.

Continue the artificial respiration. If necessary, continue two hours or longer without interruption until natural breathing is restored. If natural breathing

stops after being restored use artificial respiration again.

Do not give the patient any liquid by mouth until he is fully conscious.

Give him fresh air, but keep his body warm.

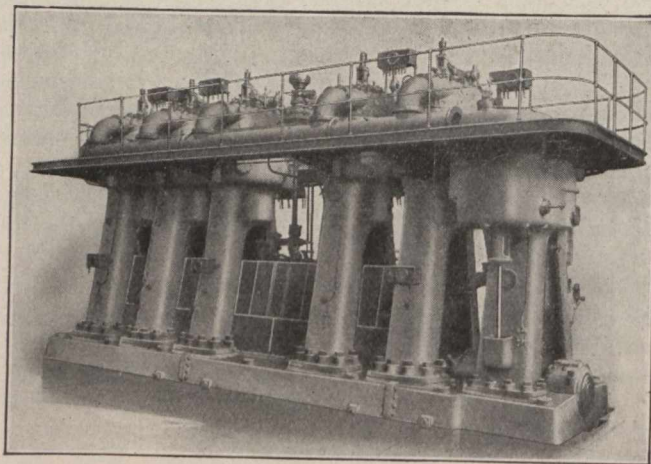
Send for the nearest doctor as soon as accident is discovered.

GALICIAN OILFIELDS.

At the time of the outbreak of war, the daily output of the Boryslaw-Tustanowice field in Galicia is stated to have been about 3,000 tons daily, and it is now estimated that the present production cannot be more than 50 per cent. of that amount. Of the men operating in the field, about 60 per cent. were liable for active service, but only about half of these, says the Petroleum World, have been called up, as the Austrian Government wishes to maintain a constant supply of oil for the needs of the railway transport service, the Austro-Hungarian Government and the German Navy. It is pointed out an advance of the Russians from the eastward past Lemberg would very probably cut off the principal Galician field of Boryslaw-Tustanowice from being a source of oil supply to the Austrian and German Governments. Germany imports at the rate of 1,200,000 tons of oil per annum, and, considering that all the sources of supply, except Austria, are closed to Germany, it will be realized how important it is to the latter country that Austria should be able to transport oil and products across the Austro-German frontier.

FIRST LARGE DIESEL ENGINE FOR UNITED STATES.

The accompanying photograph illustrates one of two 1,250 h.p. (sea level) Carels type Diesel engines, built for Phelps-Dodge & Co., for the central power plant of the Burro Mountain Copper Co., Tyrone, New Mexico. The plant is situated at an elevation of 6,700 feet, at which height the normal power developed will be



1,000 h.p. Each engine is direct connected to an 815 K.V.A.G.E. 60 cycle, three phase alternator. One engine is now ready for operation, the other practically erected in the power plant.

These are the first large Diesel engines to be installed in America. They are the Carels type, two cycle engines, with five power cylinders. At the right is the scavenging air cylinder, driven directly from the main crank shaft.

These engines were built by Usines Carels Freres, of Ghent, Belgium.